

## Cummins Technical Center (CTC) Tour Wednesday October 19, 2022 7:30am – 12:00 noon



Located in Columbus, Indiana, the Cummins Technical Center (CTC) is home to research and development conducted on diesel and alternate fuel engines, components subsystems and other advanced power systems to meet future emissions and energy efficiency demands. The CTC campus sits on 37 acres with an office building and attached laboratory building. The two buildings combined have approximately 500,000 sq. ft. under roof to provide workspace for the site's 1200 employees.

The Tech Center tour will visit several key areas including:

Test operations with its 94 test cells that can handle engines ranging from 100 to 3,000 horsepower, including special test cells for altitude testing capable of simulating engine operation at altitudes up to 12,000 feet and environmental test cells capable of simulating cold weather engine operation at temperatures down to 40 below. Several test cells are devoted to detailed emissions testing.

The Advanced Chemical Systems and Integration (ACSI) Laboratories dedicated to evaluation of ceramic, composite, and catalyst materials, aftertreatment sensors, etc. Evaluation capabilities include chemical analysis, physical and/or mechanical property testing, corrosion, wear, fatigue, and non-destructive visual and instrumental testing. In addition, micro and pilot scale gas reactors are available to evaluate material contact and interaction with exhaust gases.

The Experimental Mechanics Lab (EML) to investigate and determine the component-level durability of Cummins' products. EML capabilities include vibration and strain measurement, fatigue testing, ultrasonic diagnostics, high speed imaging and digital image correlation, etc.

Additional stops will include the advanced manufacturing test area featuring 3D printing technology, a display of Cummins new fuel agnostic platforms capable of running Diesel, gasoline, propane, natural gas, and hydrogen fuels, and a historical display of Cummins engines ranging from the company's beginnings in 1919 to the present.

## Safety notice for tour:

- 1) <u>No cameras, cell phones, or devices capable of taking pictures</u> can be used while on the shop floor. Cell phones and cameras must remain in your pockets at all times.
  - a. Use of photographic devices requires prior authorization.
- 2) Safety glasses and vests will be provided and must be worn at all times.
- 3) Proper attire must be worn by all visitors: <u>No shorts, short skirts/capri pants, open toed shoes, slick soled shoes, or heels greater than 1" solid base.</u>
  - a. Visitors in dress shoes will have to wear anti-slip shoe covers.
  - b. Please wear/bring footwear appropriate for an industrial shop.
- 4) No one under the age of 12 is allowed on the shop floor.
- 5) Use of tobacco products prohibited.
- 6) No canes, crutches, or motorized wheelchairs are allowed on the shop floor.
- 7) Everyone must always stay with the tour guide.
- 8) Everyone must always stay within the designated pedestrian walkway.

a. Visitors may not leave the walkway or touch any equipment.

In the case of CTC, another restriction is (due to construction at the site): Visitors must be able to climb stairs.

Disclaimer: "In-person tours may be cancelled due to changes in Cummins health and safety policies due to the ongoing COVID-19 situation. A virtual tour may be offered in this circumstance for those interested."

If you are interested in attending this tour, indicate that when you register and you will be sent further information.